



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,751	11/16/2001	David G. Charne	1311	8260

27310 7590 09/01/2004

PIONEER HI-BRED INTERNATIONAL INC.
7100 N.W. 62ND AVENUE
P.O. BOX 1000
JOHNSTON, IA 50131

EXAMINER

KRUSE, DAVID H

ART UNIT	PAPER NUMBER
----------	--------------

1638

DATE MAILED: 09/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/993,751

Applicant(s)

CHARNE ET AL.

Examiner

David H Kruse

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 35-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,4,6,7 and 9-15 is/are allowed.
- 6) ☒ Claim(s) 3,8 and 35-40 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/21/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR § 1.114

1. A request for continued examination under 37 CFR § 1.114, including the fee set forth in 37 CFR § 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR § 1.114, and the fee set forth in 37 CFR § 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR § 1.114. Applicant's submission filed on 21 June 2004 has been entered.

Status of the Application

2. This Office action is in response to the Amendment and Remarks filed 21 June 2004.
3. The Information Disclosure Statement filed 21 June 2004 has been considered, a signed copy is attached hereto.
4. The objection to the Specification is withdrawn.
5. The rejection of the claims as directed to the Deposit of Biological material under 35 U.S.C. § 112, first paragraph, for enablement is withdrawn in view of Applicant's statement on page 9, 5th paragraph of the response filed 21 June 2004.
6. The provisional rejection of Obviousness-type Double Patenting over copending application 09/994,092, is withdrawn in view of Applicant's amendments to the claims.
7. Those rejections or objections not specifically addressed in this Office action are withdrawn in view of Applicant's amendments to the claims or in view of Applicant's response to the previous Office action.

Art Unit: 1638

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Allowable Subject Matter

9. Claims 1, 2, 4, 6, 7 and 9-15 are allowed.

Claim Objections

10. Claims 5, 36, 38 and 40 are objected to because of the following informalities:

At claim 5, the phrase "A plant part" should read -- The plant part -- in referring to the plant part of claim 4. Correction of this issue would make the instant claim allowable.

At claims 36, 38 and 40, the phrase "A *Brassica* progeny" should read -- The *Brassica* progeny -- in referring to the previous claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

11. Claim 8 remains rejected and claims 3 and 35-40 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This rejection is repeated for the reason of record as set forth in the last Office action mailed 16 January 2004, as directed to claim 8. Applicant's arguments filed 21 June 2004 have been fully considered but they are not persuasive.

Applicant argues that the amended to claim 8 defines specific breeding methods that can be utilized in the practice of the present claimed invention, and that as amended, claim 8 recites breeding steps that do not require the introduction of additional genetics beyond those which are used or produced in claim 7 (page 8, 4th paragraph of the Remarks). This argument is not found to be persuasive because the instant claim is directed to a method of using progeny of the exemplified NS3213 *Brassica napus* plant. The art teaches that the genetic variation among individual progeny of a breeding cross allows for the identification of rare and valuable new genotypes but that these new genotypes are neither predictable nor incremental in value, but rather the result of manifested genetic variation combined with selection methods, environments and the actions of the breeder (Kevern, US Patent 5,850,009, column 4, lines 41-46). A method is not described if products used in the method are not described. See 64 Fed. Reg. 71427, 71428 (1999), comment No. 4.

Claim 3 lacks adequate written description because said claim is directed to somoclonal variants of the exemplified NS3213 *Brassica napus* plant produced from a tissue culture. Applicant does not describe somoclonal variants of the exemplified NS3213 *Brassica napus* plant produced from a tissue culture, neither in their structure or their function. Amending the instant claim to recite -- having all of the morphological and physiological characteristics of *Brassica napus* plant variety NS3213 -- would obviate this rejection.

Claims 35-40 lack adequate written description because they are directed to any *Brassica* progeny of the exemplified NS3213 *Brassica napus* plant. As discussed

Art Unit: 1638

supra, one of skill in the art cannot describe progeny of a breeding cross because said progeny are not incremental in value. In addition, the characteristics "has an "R" rating for blackleg and resistance to at least one AHAS-inhibitor herbicide" do not adequately distinguish the claimed progeny plant from others based on structure and functional characteristics by which one of skill in the art would recognize the Applicant was in possession of the invention as broadly claimed.

12. Claim 8 remains rejected and claims 3 and 35-40 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. This rejection is repeated for the reason of record as set forth in the last Office action mailed 16 January 2004, as directed to claim 8. Applicant's arguments filed 21 June 2004 have been fully considered but they are not persuasive.

Applicant argues that the methods recited in claim 8 are in fact suitable methods for producing such a commercial crop, and are described in the present application and are known to those of skill in the art, see pages 7-12 and the examples. Applicant further argues that an invention need not be of commercial standards in order to be patentable, a Brassica variety having the combination of an "R" rating for blackleg and resistance to at least one AHAS-inhibitor herbicide is a valuable contribution to the advancement of agriculture (page 11, 2nd paragraph of the Remarks). These argument are not found to be persuasive because commercial traits are standards used by one of

Art Unit: 1638

skill in the art to determine how to make and use a *Brassica* plant. Commercial viability is not a standard for patentability. In addition, claim 7, upon which claim 8 depends, is directed to a method of crossing the exemplified NS3213 *Brassica napus* plant with any other *Brassica* plant. Under such conditions wherein the exemplified NS3213 *Brassica napus* plant is crossed with a *B. rapa* or a *B oleraceae*, and resulting progeny subsequently selfed through multiple generations, one could reproduce the parental *B. rapa* or *B oleraceae* with an "R" rating for blackleg and resistance to at least one AHAS-inhibitor herbicide.

As directed to new claims 35-40, Applicant argues that methods of obtaining homogenous, homozygous and reproducible cultivars are well known in the art. Applicant argues that backcrossing is frequently used to develop stable cultivars, and that other methods are also effective and are well known and described. Applicant argues that such methods are pedigree breeding, self-pollination, haploidy, single seed descent, and modified single seed descent, which are described in the present application and are known in the art (paragraph spanning pages 11-12 of the Remarks). Applicant argues that the fact that a trait is complex does not eliminate its effectiveness in a breeding program to achieve desired traits, i.e. a complex trait can be bred and selected for, and that the present application in conjunction with the deposit, provides sufficient disclosure to produce the products of new claims 35-40, see pages 7-12 and the Examples in the present application (page 12, 3rd paragraph of the Remarks). These arguments are not found to be persuasive because the issue remains that inheritance of blackleg resistance is not predictable as discussed in the previous Office

action as taught by Pang (1996). The features that Applicant asserts makes their invention new and useful is the combination of an "R" rating for blackleg and resistance to at least one AHAS-inhibitor herbicide. As such, it is Applicant's burden to teach one of skill in the art how to make and use the invention without undue trial and error experimentation. Applicant does not teach what resistance loci for blackleg resistance the exemplified NS3213 *Brassica napus* plant comprises, or how these resistance loci will segregate in progeny plants.


Conclusion

13. The claims are free of the prior art.
14. Claims 1, 2, 4, 6, 7 and 9-15 are allowed.
15. Claim 5 is objected to.
16. Claims 3, 8 and 35-40 are rejected.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David H. Kruse, Ph.D. whose telephone number is (571) 272-0799. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Amy Nelson can be reached at (571) 272-0804. The fax telephone number for this Group is (703) 872-9306 Before Final or (703) 872-9307 After Final.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (571) 272-0547.


DAVID H. KRUSE, PH.D.
PATENT EXAMINER
AU 1638

David H. Kruse, Ph.D.
30 August 2004

18. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.